

CLAIMS

1. A server configured to send outgoing electronic messages on behalf of terminals connected thereto and to deliver incoming electronic messages to the terminals, each
5 terminal being accessed by one or more users, the server comprising:
receiving means arranged to generate or receive log data relating to one or more traffic characteristics associated with electronic messages;
analysing means arranged to analyse the log data in accordance with a criterion, so as to identify those electronic messages that satisfy the criterion;
10 identifying means arranged to identify the destination of the identified electronic messages;
processing means arranged to send a message to each of the identified destinations, requesting suspension of delivery of the identified electronic messages.
- 15 2. A server according to claim 1, including
first means arranged to receive a signal identifying whether or not an identified electronic message is related to an electronic message virus,
second means arranged to receive data indicative of the success or otherwise of the request, and, in the event that the received signal identifies an electronic message to
20 be a virus and the request is successful, to trigger deletion of the said electronic message.
3. A server according to claim 2, wherein, in the event that a received signal identifies an electronic message to be a virus and the request is unsuccessful, the
25 second means is arranged to trigger operation of identifying means and processing means running on a server corresponding to the destination of the identified electronic message.
4. A server according to claim 2, wherein, in the event that a received signal
30 identifies an electronic message not to be a virus and the request is successful, the second means is arranged to permit delivery of the identified electronic message.
5. A server according to any one of the preceding claims, including
first storage for storing details relating to such electronic messages;

further storage for storing a mapping between users and the organisational units to which the users belong,

display means for displaying a plurality of images, each representative of an organisational unit;

5 wherein the server is arranged, in use, such that in response to a request for data relating to a user,

the first storage is arranged to output data identifying electronic messages emanating from that user;

10 the further storage is arranged to output data identifying which of the organisational units that user belongs to;

and, for those electronic messages that are identified to satisfy the criterion, the display means is arranged to insert, on the image corresponding to the identified organisational unit, a visual identifier representative of the volume or type of identified electronic messages.

15

6. A server according to claim 5, wherein, for those electronic messages that are identified to satisfy the criterion, the display means is arranged to display a list of users on an associated image, and for each user on the list, to display details of the volume and/or type of identified electronic messages emanating therefrom.

20

7. A server according to claim 6, wherein the display means is arranged to insert a link between the identified organisational unit and the organisational unit corresponding to the identified destination.

25 8. Apparatus for delivering electronic messages, comprising a plurality of servers according to any one of the preceding claims; wherein at least one of the servers comprises:

receiving means arranged to receive a request to suspend delivery of an identified electronic message;

30

polling means arranged to check whether or not the identified electronic message has been delivered, and if it has not, to block retrieval thereof by a respective terminal connected thereto;

wherein, in response to receipt of a said request, the polling means is arranged to check delivery of the identified electronic message, and in the event that it has not
35 been delivered, to block retrieval thereof.

9. Apparatus according to claim 8, wherein the at least one server includes deleting means for deleting an electronic message, and, in response to receipt of a signal identifying that an identified electronic message is related to an electronic message virus, the deleting means is arranged to check whether retrieval of the identified electronic message has been blocked, and if it has, to delete it.

10. Apparatus according to claim 8 or claim 9, wherein, in the event that the identified electronic message is related to an electronic message virus, and the identified electronic message has not been blocked, the server is arranged to invoke its identifying means and processing means in respect of electronic messages sent by the identified destinations.

11. Apparatus according to any one of the preceding claims, wherein the criterion includes any one, or some, of type of electronic message, size of electronic message and number of electronic messages emanating from a user.

12. A method of controlling propagation of electronic messages through a network, the network comprising a plurality of servers configured to send outgoing electronic messages on behalf of terminals connected thereto and to deliver incoming electronic messages to the terminals, each terminal being accessed by one or more users, the method comprising

receiving or generating data relating to one or more traffic characteristics associated with electronic messages sent from, or received at, a said server;

25 analysing the received data in accordance with a specified criterion, so as to identify those electronic messages that satisfy the criterion;

identifying the destination of the identified electronic messages; and

30 sending a message to each of the identified destinations, requesting suspension of delivery of the identified electronic messages.

13. A method according to claim 12, including receiving a signal identifying whether or not an identified electronic message is related to an electronic message virus,

receiving data indicative of the success or otherwise of the request, and, in the event that the received signal identifies an electronic message to be a virus and the request is successful, triggering deletion of the said electronic message.

14. A method according to claim 13, wherein, in the event that a received signal identifies an electronic message to be a virus and the request is unsuccessful, the method includes triggering the identifying and sending steps to be carried out in respect
5 of a server corresponding to the destination of the identified electronic message.

15. A method according to claim 13, wherein, in the event that a received signal identifies an electronic message not to be a virus and the request is successful, the method includes triggering delivery of the identified electronic message.

10

16. A method according to anyone of claims 12 to 15, including
receiving data identifying a mapping between users and the organisational units
to which the users belong,
displaying a plurality of images, each representative of an organisational unit;
15 outputting data identifying the users who originated the electronic messages that
are identified to satisfy the criterion;
identifying, from the mapping, which of the organisational units those users
belong to;
and, inserting, on an image corresponding to the identified organisational units,
20 visual identifiers representative of the volume or type of identified electronic messages.

17. A method according to claim 16, wherein, for those electronic messages that are identified to satisfy the criterion, the method includes displaying a list of users on an associated image, and for each user on the list, displaying details of the volume and/or
25 type of identified electronic messages emanating therefrom.

18. A method according to claim 17, including inserting a link between the identified organisational unit and the organisational unit corresponding to the identified destination.

30 19. A method according to any one of the preceding claims, wherein the criterion includes any one, or some, of type of electronic message, size of electronic message and number of electronic messages emanating from a user.

20. A method of identifying electronic message activity within an organisation, the organisation having a plurality of users associated therewith, each of which is connected with an organisational unit, the method comprising:

receiving data relating to electronic messages sent by a user;

5 analysing the received data in accordance with a specified criterion, so as to identify those electronic messages that satisfy the criterion;

receiving data identifying a mapping between users and the organisational units to which the users belong,

displaying a plurality of images, each representative of an organisational unit;

10 outputting data identifying the users who originated the electronic messages that are identified to satisfy the criterion;

identifying, from the mapping, which of the organisational units the users belong to; and

15 inserting, on an image corresponding to the identified organisational units, visual identifiers representative of the volume or type of identified electronic messages.

21. A method according to claim 20, wherein the criterion includes any one, or some, of type of electronic message, size of electronic message and number of electronic messages emanating from a user.

20

22. A computer program, or a suite of computer programs, comprising a set of instructions to cause a computer, or a suite of computers, to perform the method according to any one of claims 12 to 21.

25 23. A server configured to send outgoing electronic messages on behalf of terminals connected thereto and to deliver incoming electronic messages to the terminals, each terminal being accessed by one or more users, the server comprising: logging means arranged to generate log data relating to one or more traffic characteristics associated with electronic messages; and, analysing means to analyse the received
30 data in accordance with a specified criterion, so as to identify those electronic messages that satisfy the criterion.

24. A server according to claim 23, the server comprising identifying means arranged to identify the destination of the identified electronic messages; and, processing means

arranged to send a message to each of the identified destinations, requesting suspension of delivery of the identified electronic messages.

25. A server according to any of claims 1-7 and 23 –24, the server being arranged to receive authentication data from a terminal connected thereto, the authentication data being associated with one or more electronic messages, the server having a comparison stage configured to make a comparison between the log data relating to an identified message and the authentication data associated with that message, the processing means being arranged to execute a decision to send a suspension request to the identified destination of that message in dependence on the comparison made by the comparison stage.
26. A server according to claim 25, wherein the authentication data is received in encrypted form, the comparison stage being configured to decrypt the encrypted authentication data and to compare the decrypted data with the log data.
27. A terminal for sending and receiving electronic messages to and from a server according to claim 25 or claim 26, wherein the terminal has an interface, the interface having a user input for receiving send instructions to send one or more specified electronic messages to a server, the user input being configured to receive a confirmation input from the user to confirm the send instructions and wherein in response to the confirmation input, the terminal is configured to send the specified electronic messages towards the server and to send authentication data associable with the specified electronic messages.
28. A terminal according to claim 27 wherein the terminal is configured to detect whether a criterion relating to the specified electronic message is met, and to request a confirmation input from a user at the user interface in response to the criterion being met.
29. A terminal according to claim 27 or claim 28, wherein the terminal is configured to transmit the authenticating data in encrypted form.

30. A carrier having a computer program stored thereon, the computer program being executable on a terminal so as to cause the terminal to operate according to the terminal specified in any of claims 27-29.

5 31. A carrier having a computer program thereon for sending and receiving electronic messages, the program being executable on a terminal having a user interface, the computer program being configured to perform the following steps when executed: (a) invite a user to input at the user interface
10 send instructions for sending one or more electronic messages; (b) determine if a criterion relating to the electronic messages is met; (c) if the criterion is met, invite the user to input at the user interface a confirmation input to confirm the send instructions; (d) upon receipt of the confirmation input, transmit the electronic messages from the terminal; and (e) transmit authentication data
15

32. A carrier having an improvement computer program, the improvement computer program being executable on a terminal having electronic messaging software running thereon, so as to reduce the likelihood of a computer virus using the messaging software to propagate from the terminal, the messaging software
20 being configured to invite the user to input at the user interface send instructions for sending one or more specified electronic messages, and in response to the send instructions, to transmit the messages from the terminal, the improvement computer program being configured when executed to; (a) invite a user to input confirmation instructions at the user interface to confirm
25 the send instructions; (b) only permit the user to send electronic messages once the user has input the confirmation instructions; and, (c) upon receipt of the confirmation instructions, cause the terminal to transmit therefrom authentication data associable with the specified messages.

30 33. A carrier according to claim 31 or 32, wherein the authentication data is transmitted encrypted form.

34. A carrier according to any one of claims 31 – 33, wherein the computer program thereon is configured, when executed, to request a user to input password

data as part of the confirmation instructions, and to only permit the terminal to send authentication data once the password data has been input by the user.

5 35. A server according to any of claims 1-7 and 23 -26, wherein the criterion is met if the log data relating to a target electronic message indicates that a threshold number of electronic messages and/or a threshold data volume originates from a common terminal or user, in a time interval during which the target electronic message was sent.

10 36. A server configured to send outgoing electronic messages on behalf of terminals connected thereto and to deliver incoming electronic messages to the terminals, each terminal being accessed by one or more users, the server comprising:

receiving means arranged to generate or receive log data relating to such electronic messages;

15 analysing means arranged to analyse the log data in accordance with a specified criterion, so as to identify those electronic messages that satisfy the criterion;

identifying means arranged to identify the destination of the identified electronic messages;

20 processing means arranged to send a message to each of the identified destinations, requesting suspension of delivery of the identified electronic messages.